## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Goossens et. al.

Serial No.: To be assigned

Filed: September 18, 2003

For: THE USE OF GENES ENCODING MEMBRANE TRANSPORTER PUMPS TO

STIMULATE THE PRODUCTION SECONDARY METABOLITES IN

**BIOLOGICAL CELLS** 

Examiner: To be assigned

Group Art Unit: To be assigned

Attorney Docket No.: 2676-6085US

NOTICE OF EXPRESS MAILING

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## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in

37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

	U.S. Patent Documents	
U.S. Patent No.	Publication Date	Datantas
US - 5,239,044	08-24-1993	<u>Patentee</u>
US - 5,552,307	09-03-1996	Cooper et al.
US - 5,599,977		Kessler et al.
US - 5,831,043	02-04-1997	Kiely et al.
-	11-03-1998	Fleche
US - 6,049,004	04-11-2000	Kiely et al.
US - 6,054,637	04-25-2000	Boller et al.
US - 6,069,009	05-30-2000	Pepin et al.
US - 6,166,290	12-26-2000	Rea et al.
Dogument N.	Foreign Patent Documents	
Document No.	Publication Date	Patentee
WO 98/21938	05-28-1998	Trustees of the Univ. of
WO 00/10714		Pennsylvania
WO 99/10514	03-04-1999	North Carolina State Univ.
WO 00/18886	04-06-2000	Spalding et al.
WO 00/46383	08-10-2000	Memelink et al.
WO 01/07621 A2	02-01-2001	Institute for Genomic
WO 02/083888 A2	10-24-2002	Research Vlaams Interuniversitair Instituut

Attorney Docket No.: 2676-6085US

## Other Documents

PCT International Search Report, PCT/EP02/04322, dated December 11, 2002.

BALZI et al., PDR5, a Novell Yeast Multidrug Resistance Conferring Transporter Controlled by the Transcription Regulator PDR1, The Journal of Biological Chemistry, January 21, 1994, pp. 2206-14, Vol. 269, No. 3.

DEL SORBO et al., Review, Fungal Transporters Involved in Efflux of Natural Toxic Compounds and Fungicides, Fungal Genetics and Biology, 2000, pp. 1-15, Vol. 30.

KLEIN et al., The ABC-like vacuolar transporter for rye mesophyll flavone glucuronides is not species-specific, Phytochemistry, 2001, pp. 153-59, Vol. 56.

KOLACZKOWSKI et al., Anticancer Drugs, Ionophoric Peptides, and Steroids as Substrates of the Yeast Multidrug Transporter Pdr5p, The Journal of Biological Chemistry, December 6, 1996, pp. 31543-48, Vol. 271, No. 49.

KOLACZKOWSKI et al., In Vivo Characterization of the Drug Resistance Profile of the Major ABC Transporters and Other Components of the Yeast Pleiotropic Drug Resistance Network, Microbial Drug Resistance, 1998, pp. 143-58, Vol. 4, No. 3.

THEODOULOU et al., Review, Plant ABC transporters, Biochimica et Biophysica Acta, 2000, pp. 79-103, Vol. 1465.

DATABASE SWISSPROT 'Online! EBI, JASINSKI et al., ABC1 protein, Abstract, XP-002221647.

DATABASE SWISSPROT 'Online! EBI, FEDERSPIEL et al., Putative ABC transporter, Abstract, XP-002221648.

DATABASE EMBL 'Online! EBI, SMART, S.polyrrhiza mRNA for PDR5-like ABC transporter, Abstract, XP-002221649.

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56 & 1.175, Applicants offer hereby identifies the following listed copending applications naming the same inventor(s):

Attorney Docket No.: 2676-6085US

Attorney Docket No.:

2676-5585US 10/331,152

Serial No.: Filing Date:

12/27/2002

Title:

HETERLOGOUS GENE EXPRESSION IN PLANTS

Attorney Docket No.:

2676-6062US 10/647,625

Serial No.: Filing Date:

8/25/2003

Title:

PLANT STRESS-REGULATED GENES

This Information Disclosure Statement is filed within three (3) months of the filing date of the above-identified application, and no certification pursuant to 37 C.F.R. § 1.97(c) or a fee pursuant to 37 C.F.R. § 1.17(p) is required.

Respectfully submitted,

Allen C. Turner

Registration No. 33,041 Attorney for Applicant(s)

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Date: September 18, 2003

ACT/bv

Enclosures: Form PTO-1449 or PTO/SB/08

Cited Documents

Document in ProLaw

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitu	ite for form 1449A/PTO				Complete if Known	•
INF	ORMATION	DI	SCLOSURE	Application Number	To be assigned	
STATEMENT BY APPLICANT				Filing Date	September 18, 2003	
STATEMENT DI ATTECANT		First Named Inventor	Goossens et. al.			
				Group Art Unit	To be assigned	
(use as many sheets as necessary)				Examiner Name	To be assigned	
Sheet		of	2	Attorney Docket Number	2676-6085US	

U.S. PATENT DOCUMENTS							
Examiner Cite Initials * No.1	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant			
	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear			
		US-5,239,044	08-24-1993	Cooper et al.			
		US- 5,552,307	09-03-1996	Kessler et al.			
	1	US- 5,599,977	02-04-1997	Kiely et al.			
		US- 5,831,043	11-03-1998	Fleche			
		US- 6,049,004	04-11-2000	Kiely et al.			
		US- 6,054,637	04-25-2000	Boller et al.			
	T	US- 6,069,009	05-30-2000	Pepin et al.			
		US- 6,166,290	12-26-2000	Rea et al.			
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FOREIGN PATENT DOCUMENTS							
Examiner Cite No. 1	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,			
	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		
		WO 98/21938	05-28-1998	Trustees of the Univ. of Pennsylvania			
		WO 99/10514	03-04-1999	North Carolina State Univ.			
		WO 00/18886	04-06-2000	Spalding et al.			
		WO 00/46383	08-10-2000	Memelink et al.			
		WO 01/07621 A2	02-01-2001	Institute for Genomic Research			
		WO 02/083888 A2	10-24-2002	Vlaams Interuniversitair Instituut			
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Examiner Signature	Date Considered	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute fo	or form 1449A/PTO				Complete if Known
INEO	DM ATTAN	T	COLOCUDE	Application Number	To be assigned
			SCLOSURE	Filing Date	September 18, 2003
STATEMENT BY APPLICANT				First Named Inventor	Goossens et. al.
				Group Art Unit	To be assigned
(use as many sheets as necessary)				Examiner Name	To be assigned
Sheet 2 of 2		Attorney Docket Number	2676-6085US		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		PCT International Search Report, PCT/EP02/04322, dated December 11, 2002.	
		BALZI et al., PDR5, a Novell Yeast Multidrug Resistance Conferring Transporter Controlled by the Transcription Regulator PDR1, The Journal of Biological Chemistry, January 21, 1994, pp. 2206-14, Vol. 269, No. 3.	
		DEL SORBO et al., Review, Fungal Transporters Involved in Efflux of Natural Toxic Compounds and Fungicides, Fungal Genetics and Biology, 2000, pp. 1-15, Vol. 30.	
		KLEIN et al., The ABC-like vacuolar transporter for rye mesophyll flavone glucuronides is not species-specific, Phytochemistry, 2001, pp. 153-59, Vol. 56.	
		KOLACZKOWSKI et al., Anticancer Drugs, Ionophoric Peptides, and Steroids as Substrates of the Yeast Multidrug Transporter Pdr5p, The Journal of Biological Chemistry, December 6, 1996, pp. 31543-48, Vol. 271, No. 49.	
		KOLACZKOWSKI et al., In Vivo Characterization of the Drug Resistance Profile of the Major ABC Transporters and Other Components of the Yeast Pleiotropic Drug Resistance Network, Microbial Drug Resistance, 1998, pp. 143-58, Vol. 4, No. 3.	
		THEODOULOU et al., Review, Plant ABC transporters, Biochimica et Biophysica Acta, 2000, pp. 79-103, Vol. 1465.	
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Examiner		Date	
Signature		Considered	]

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<sup>&</sup>lt;sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.